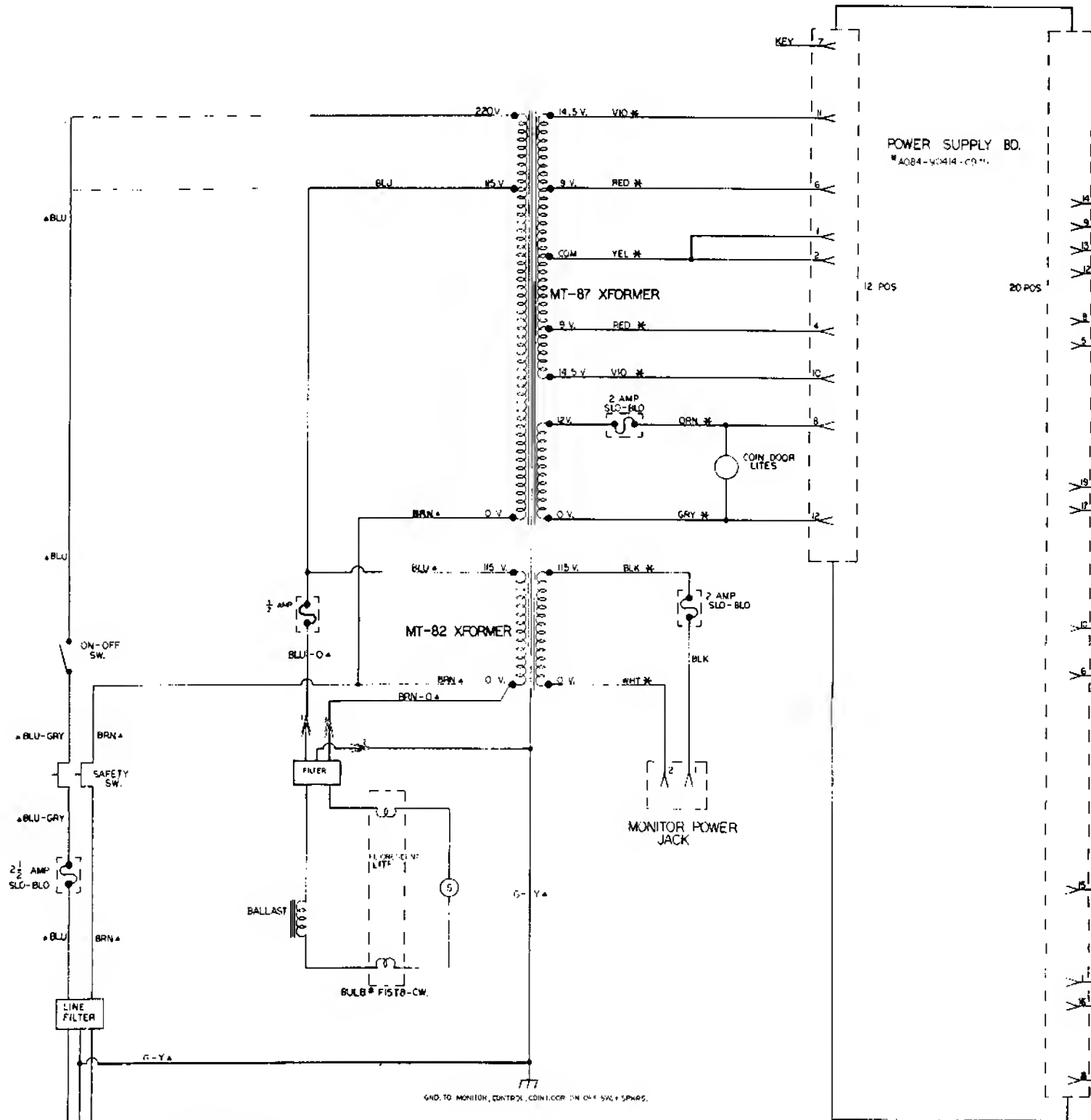


DISPLAY**DESCRIPTION**

RAM	OK	All RAMs are good
RAM	OL	RAM located on Video PC board at position 1K is bad.
RAM	OH	RAM located on Video PC board at position 1K is bad.
RAM	1L	RAM located on Video PC board at position 1K is bad.
RAM	1H	RAM located on Video PC board at position 1K is bad.
RAM	2L	RAM located on Video PC board at position 3E is bad.
RAM	2H	RAM located on Video PC board at position 3F is bad.
RAM	3L	RAM located on Video PC board at position 3K is bad.
RAM	3H	RAM located on Video PC board at position 3L is bad.
RAM	4L	RAM located on Video PC board at position 3H is bad.
RAM	4H	RAM located on Video PC board at position 3J is bad.
ROM	OK	All ROMs are good.
ROM	01	ROM located on CPU PC board at position 3N is bad.
ROM	02	ROM located on CPU PC board at position 3M is bad.
ROM	03	ROM located on CPU PC board at position 3L is bad.
ROM	04	ROM located on CPU PC board at position 3K is bad.
ROM	11	ROM located on CPU PC board at position 3J is bad.
ROM	21	ROM located on CPU PC board at position 3E is bad.

Figure 4b. Board location coordinates (Self test display)

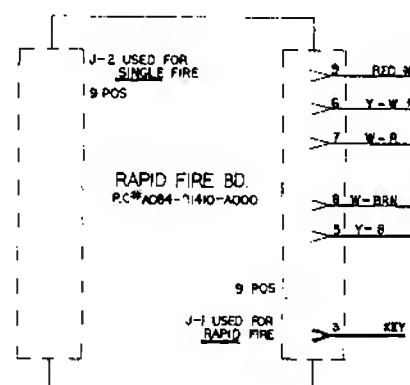


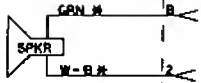
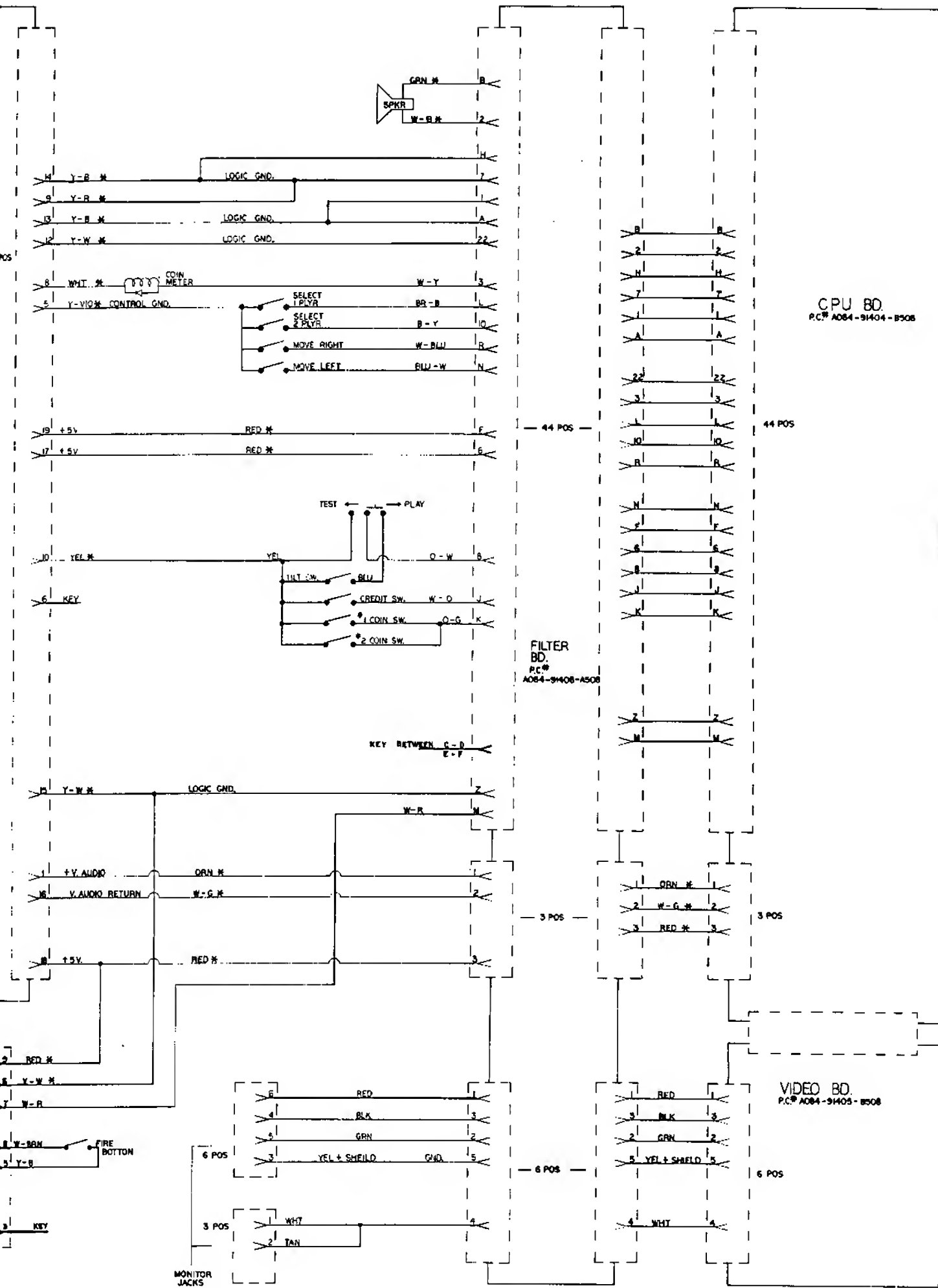
GALAGA U.R.
SCHEMATIC * MOSI-00508-A003

REVISIONS

REVISIONS	DATE	NAME
ADDED 1 LTR H-1	11-29-81	W. MORGAN
RADIO FIRE BD.		

NOTES: 1. # = PARTS
2. A.T. # AND MOD. IN PULL



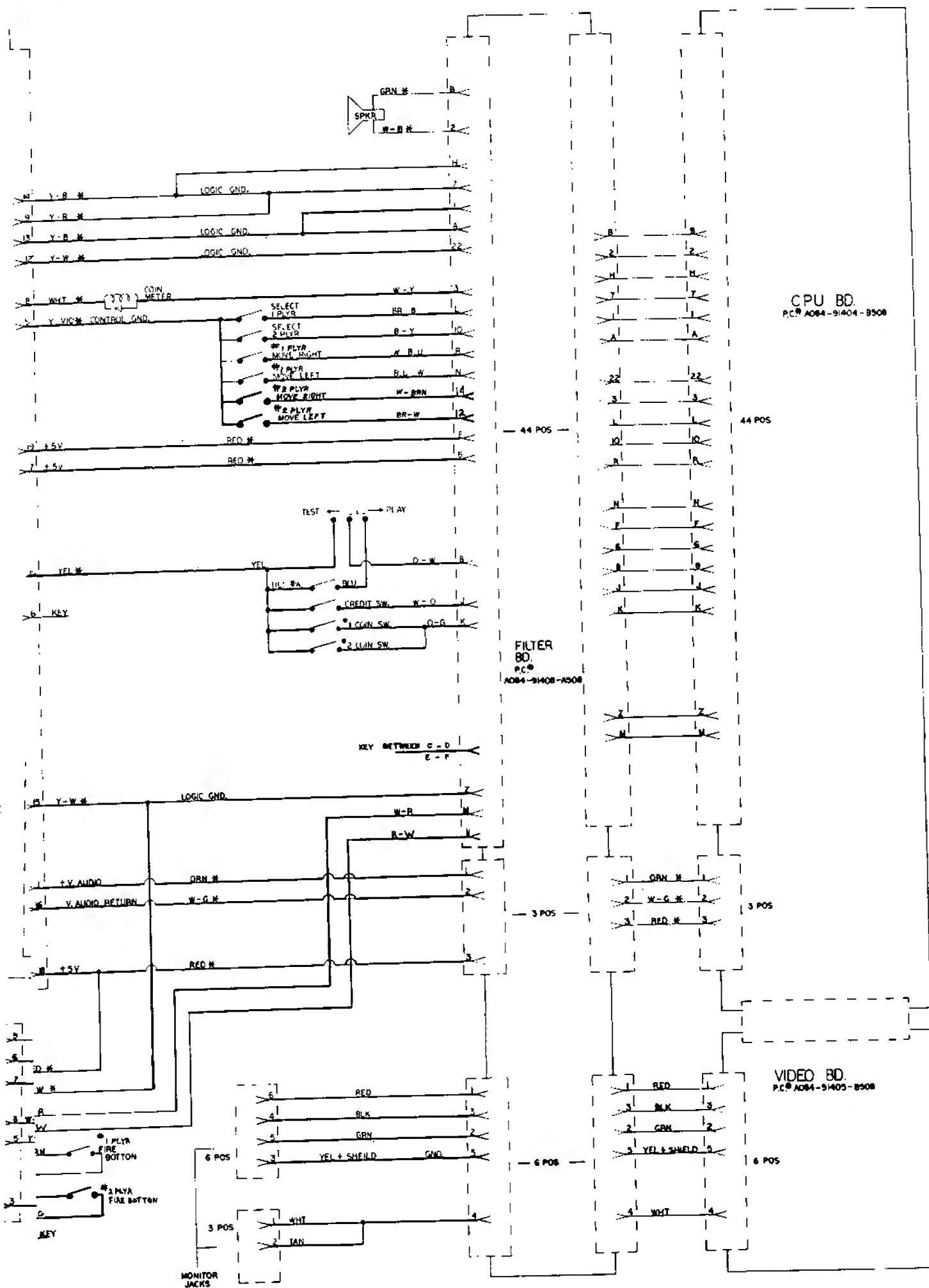


CPU BD.
P.C.# A084-91404-B508

FILTER BD.
P.C.# A084-91408-A508

VIDEO BD.
P.C.# A084-91405-B508

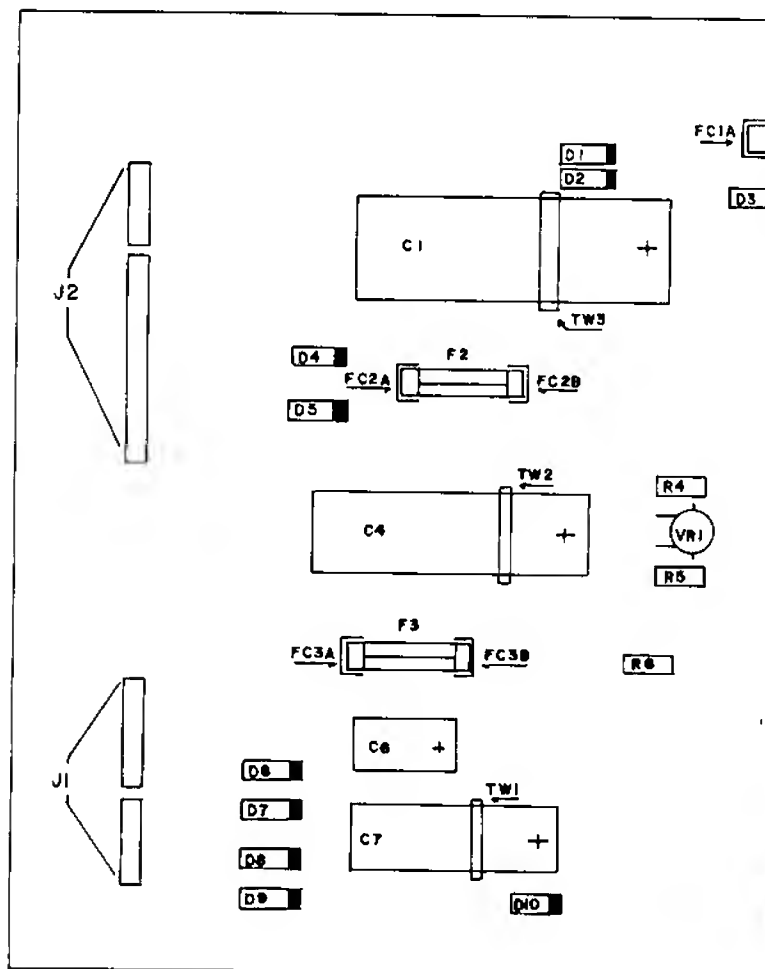
MONITOR JACKS

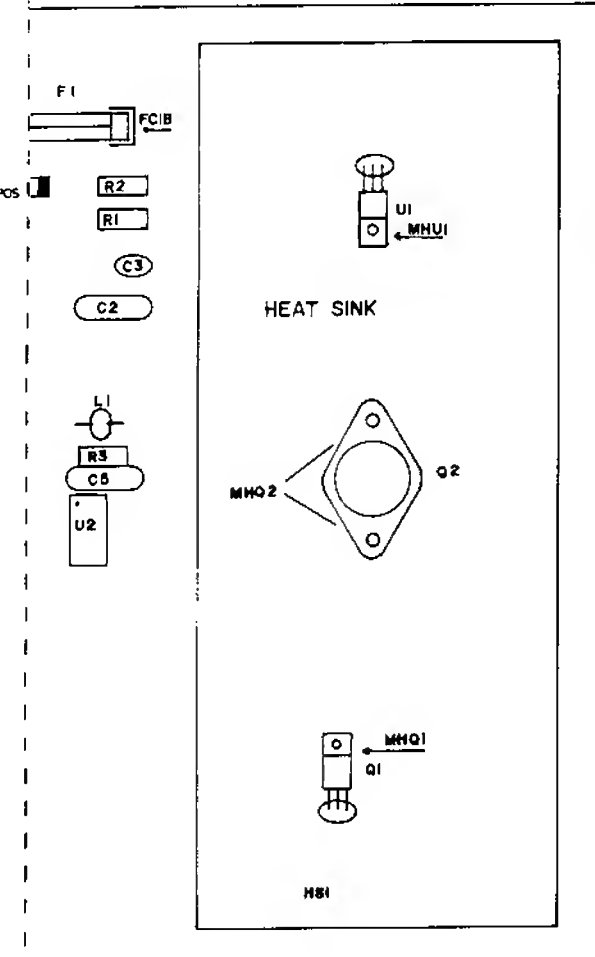


DESIGNATION

DESCRIPTION

C1	10000 MF 35V AX. ELEC.
C2	.01MF 50V AX. CER.
C3	1MF 25V TANT.
C4	20000MF 16V AX. ELEC.
C5	100PF 50V AX. CER.
C6	470MF 16V AX. ELEC.
C7	4700MF 25V " "
R1	470 OHM 1/4W 5% CRBN
R2	100 " " " "
R3	2.7K " " " "
R4	560 " " " "
R5	510 " " " "
R6	10 " " " "
VR1	100 OHM 1/4W CRBN. FLM.
D1, D2	A14F
D3	1N4004
D4, D5	MR750
D6-D9	A15F
D10	A14F
Q1	TIP31
Q2	2N3055
U1	LM317
U2	3032
L1	FERROXCUBE BEAD
H81	HEAT SNK
F1	FUSE 2A
F2	" 8A
F3	" 8A
FC1A, FC1B, FC2A	FUSECLIP W/ STOP
FC2B, FC3A, FC3B	" "
J1	CONN. KK.156 (RA)(5-PIN)(6-PIN)
J2	" " (RA)(5-PIN)(13-PIN)
MHQ1	MOUNTING HARDWARE Q1
	(1) SCREW 4-40X10 SLT RND
	(1) WSH.4 120-.250-018
	(1) HEXNUT 4-40
	(1) SHOULDER WSH. 974-302
	THERMAL COMPOUND AS REQ.
	(1) TO-220 INSULATOR RT-3.5 MICA
MHQ2	MOUNTING HARDWARE Q2
	(2) SCREW 4-40X10 SLT RND
	(2) WSH.4 120-.250-018
	(2) HEXNUT 4-40
	(2) SHOULDER WSH. 974-302
	THERMAL COMPOUND AS REQ.
	(1) TO-3 RT-1.6 FILM
MHU1	MOUNTING HARDWARE U1
	(1) SCREW 4-40X10 SLT RND
	(1) WSH.4 120-.250-018
	(1) HEXNUT 4-40
	(1) SHOULDER WSH. 974-302
	THERMAL COMPOUND AS REQ.
	(1) TO-220 INSULATOR RT-3.5 MICA
TW1-TW3	TIE WRAPS





DESCRIPTION	QTY	DESIGNATION	PART NUMBER
100 PF 50V AX.CER.	1	C5	0171-043H6-JXXV
.01MF "	1	C2	0171-097H2-JXXX
1MF 25V TANT.	1	C3	0935-00814-0100
470MF " AX.ELEC.	1	C6	0175-271EX-EXXX
4700MF " "	1	C7	0175-314EX-EXBX
10000MF 35V AX.ELEC.	1	C1	0175-322GX-EXBX
20000 16V MF " "	1	C4	0935-00814-0800
10 OHM 1/4w 5% CBN	1	R6	0062-051B3-1XXX
100 " " " "	1	R2	0062-110B3-1XXX
470 " " " "	1	R1	0062-156B3-1XXX
510 " " " "	1	R5	0062-159B3-1XXX
560 " " " "	1	R4	0062-162B3-1XXX
2.7K " " " "	1	R3	0062-199B3-1XXX
100 " " CBN FLM	1	VR1	0063-025AX-1DEX
1N4004	1	D3	0508-00801-0200
A14F	3	D1,D2,D10	0064-168XX-XXGX
A15F	4	D6-D9	0064-169XX-XXGX
MR750	2	D4,D5	0064-303XX-XXJX
1IP31	1	Q1	0065-485XX-XXXX
2N3055	1	Q2	0935-00800-0000
3532	1	U2	0066-044BX-XXXX
LM317	1	U1	0935-00804-3600
FERROXCUBE BEAD	1	L1	0017-00009-0225
HEAT SINK	1	HS1	0068-045XX-ABDX
FUSE 2A	1	F1	0017-00003-0005
FUSE 6A	1	F3	0017-00003-0008
FUSE 8A	1	F2	0017-00003-0184
FUSECLIP	6	FC1A,FC1B,FC2A,FC2B,FC3A,FC3B	0017-00003-0214
KK 156 (RA) (5)	2	J1,J2	3000-16387-0500
KK 156 (RA) (6)	1	J1	3000-16387-0600
KK 156 (RA) (13)	1	J2	3000-16387-1300
SCREW 4-40x10	4	MHU1,MHQ1,MHQ2	0017-00101-0727
WSH 4 120-250-018	4	" " "	0017-00104-0071
HEXNUT 4-40	4	" " "	0017-00103-0002
SHOULDER WSH	4	" " "	0017-00042-0109
THERMAL COMPOUND	AS REQ.	" " "	0017-00009-0204
TO-220,INSULATOR	2	MHU1,MHQ1	0017-00003-0205
TO-3 INSULATOR	1	MHQ2	0017-00042-0108
TIE WRAPS	3	TW1-TW3	0017-00042-0105

M051-00935-C028

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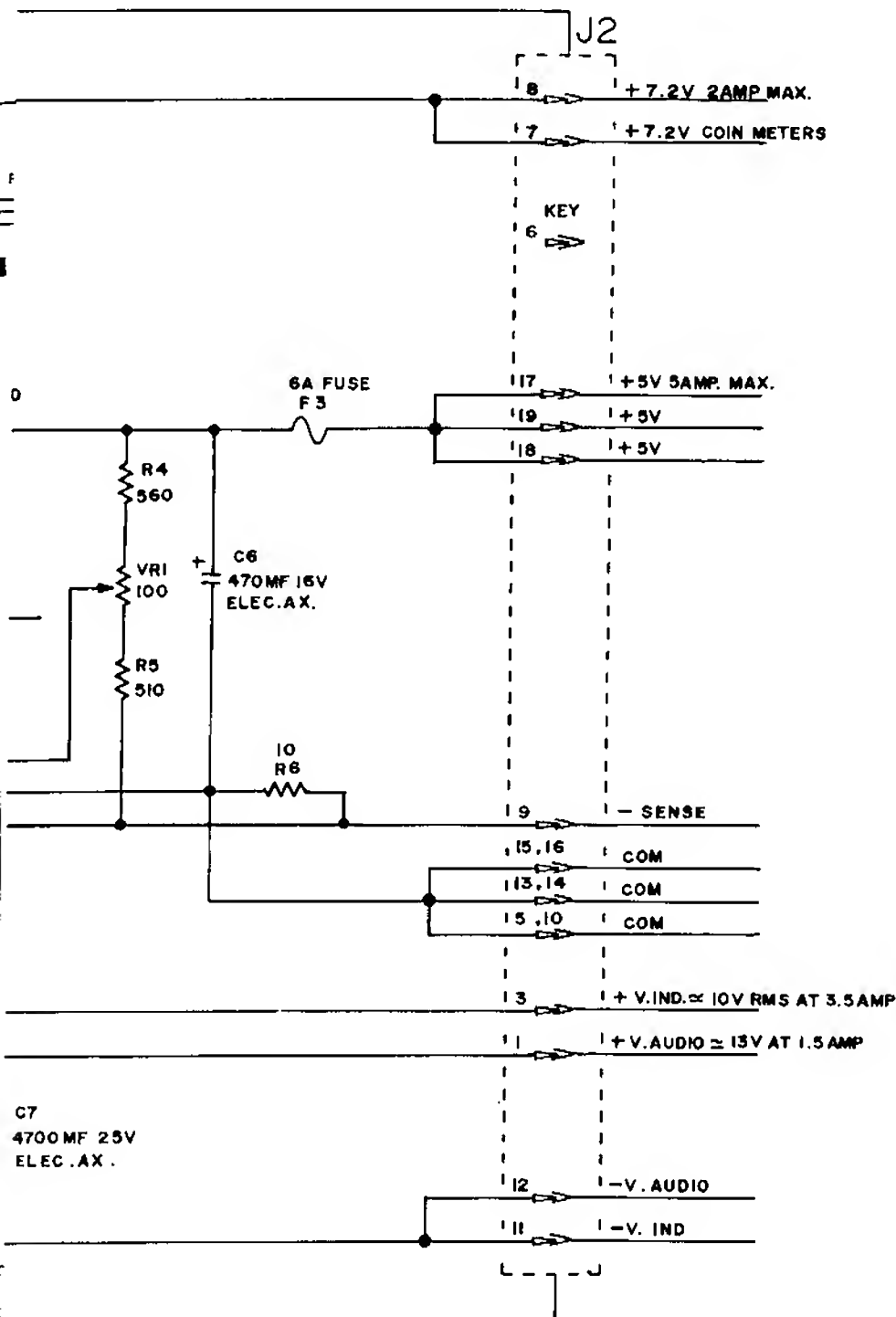
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CHKD	MM	DATE	10-10-61
APP'D	MM	DATE	10-10-61
DATE	10-10-61	BY	Full
CHKD	MM	DATE	10-10-61
APP'D	MM	DATE	10-10-61

MIDWAY MFG. CO.
FRANKLIN, PA. 15031
A BAILLY CO.

POWER SUPPLY

PART NO
A084-90414 C935

REVISIONS



SCHEMATIC: M051-00935-C025

REVISIONS

USED ON GALAGA

MIDWAY MFG. CO.

FRANKLIN, ILL.

DWG. HEAT TREAT SCALE

FULL

NO REQ'D PER

PART NO.

10-1-81

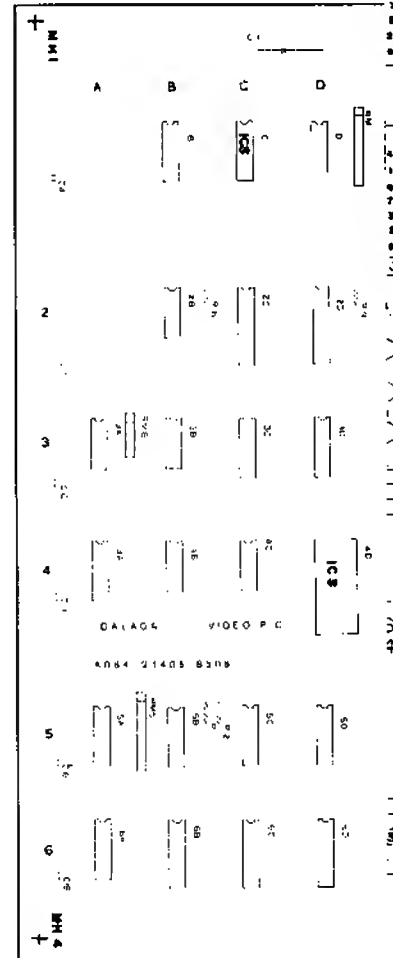
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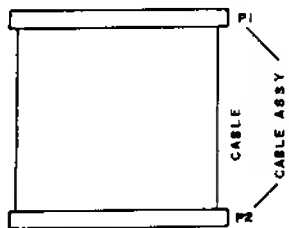
POWER SUPPLY

A084-90414-C935

DESIGNATION LIST

DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION
C1	470 MF 16V AX ELEC.	IC	9C,50,DE,5F,5H,5J
C2	.001 MF 50V CER	"	5K
C3	220 PF 500V 5% MICA	"	5L
C4-C21	.1MF 50V CER.	"	5M
		"	5N
		"	5A
		"	5B
		"	5C,5D,5E,5F
		"	5H
		"	5J,5K,5L,5M
		"	5N
R1	220 OHM 1/4W 5% CRBN.	IC5 IC	16-PIN IC SOCKET
R2	470 " " " "	"	1H
R3	220 " " " "	"	1K
R4	470 " " " "	"	1L,1M
R5	1K " " " "	"	2N
R6	220 " " " "	"	3E,3F,3H,3J,3K,3L
R7	470 " " " "	"	4D,4F
R8,R9	1K " " " "	"	4H
R10	100 " " " "	"	4L,4M
R11-R14	470 " " " "	"	5N
R15,R16	1K " " " "		
R17	330 " " " "	J1	CONN - R.A. HEADER 50-PIN
R18-R22	1K " " " "	J2	CONN - PCB HEADER 6-PIN
RM1-RM4	2.2K OHM 6-UNIT 9-PIN SIP	MN1-MN4	DUAL LK4 PCB SPACER
RMS	1K " " " "	PCB	A080-91405-B508
RMS-RM8	1K OHM 4-UNIT 5-PIN SIP		
		CABLE ASSY	AS BELOW
IC 18	74LS155	P1,P2	PLUG-SOCKET CONNECTOR 50-PIN
" IC	99-5 PROM (256X4)	CABLE	RISSON CABLE- 33FT 50-CONNECTOR
" ID	74LS08		28 GA STRND.RND. CONDUCTOR
" IE	74LS138		
" IF	74LS32		
" IH	04XX CUSTOM IC		
" IK	STATIC RAM (2KX8)		
" IL	00XX CUSTOM IC		
" IM	07XX " "		
" 2B	74LS20		
" 2C	74LS275		
" 2D	74LS377		
" 2E	74LS273		
" 2F,2H,2J,2K	74LS245		
" 2L	74LS273		
" 2M	74LS377		
" 2N	99-4 PROM (256X4)		
" 3A	74LS20		
" 3B	74LS86		
" 3C,3D	74LS243		
" 3E,3F,3H,3J,3K,3L	2114-2 RAM (1KX4)		
" 3M	74LS00		
" 3N	74LS386		
" 4A	74LS157		
" 4B,4C	74LS86		
" 4D	99-L EPROM (4096X8)		
" 4F	99-K		
" 4H	02XX CUSTOM IC		
" 4L	99-J EPROM (4096X8)		
" 4M	05XX CUSTOM IC		
" 5A	74LS365		
" 5B	74LS298		





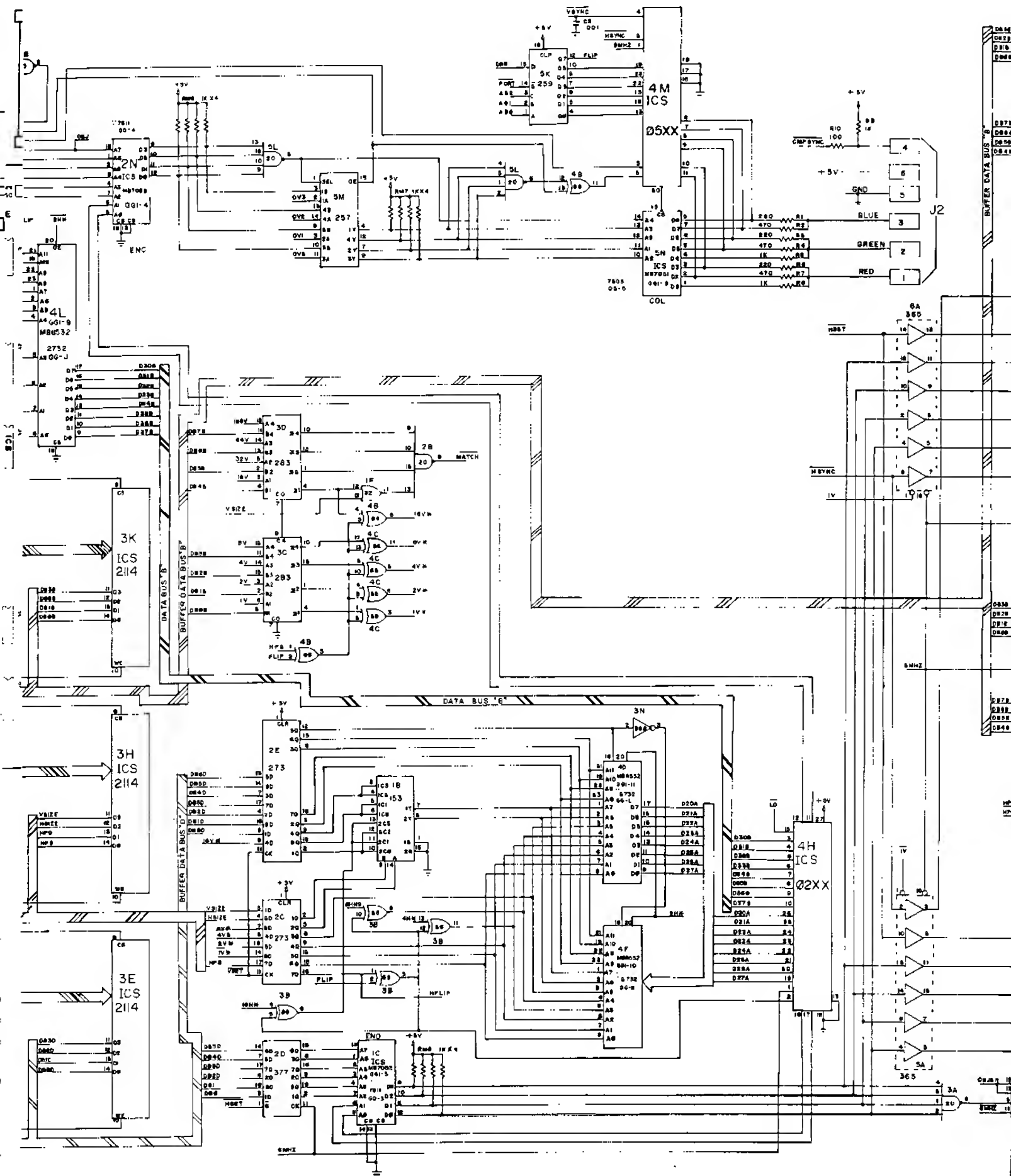
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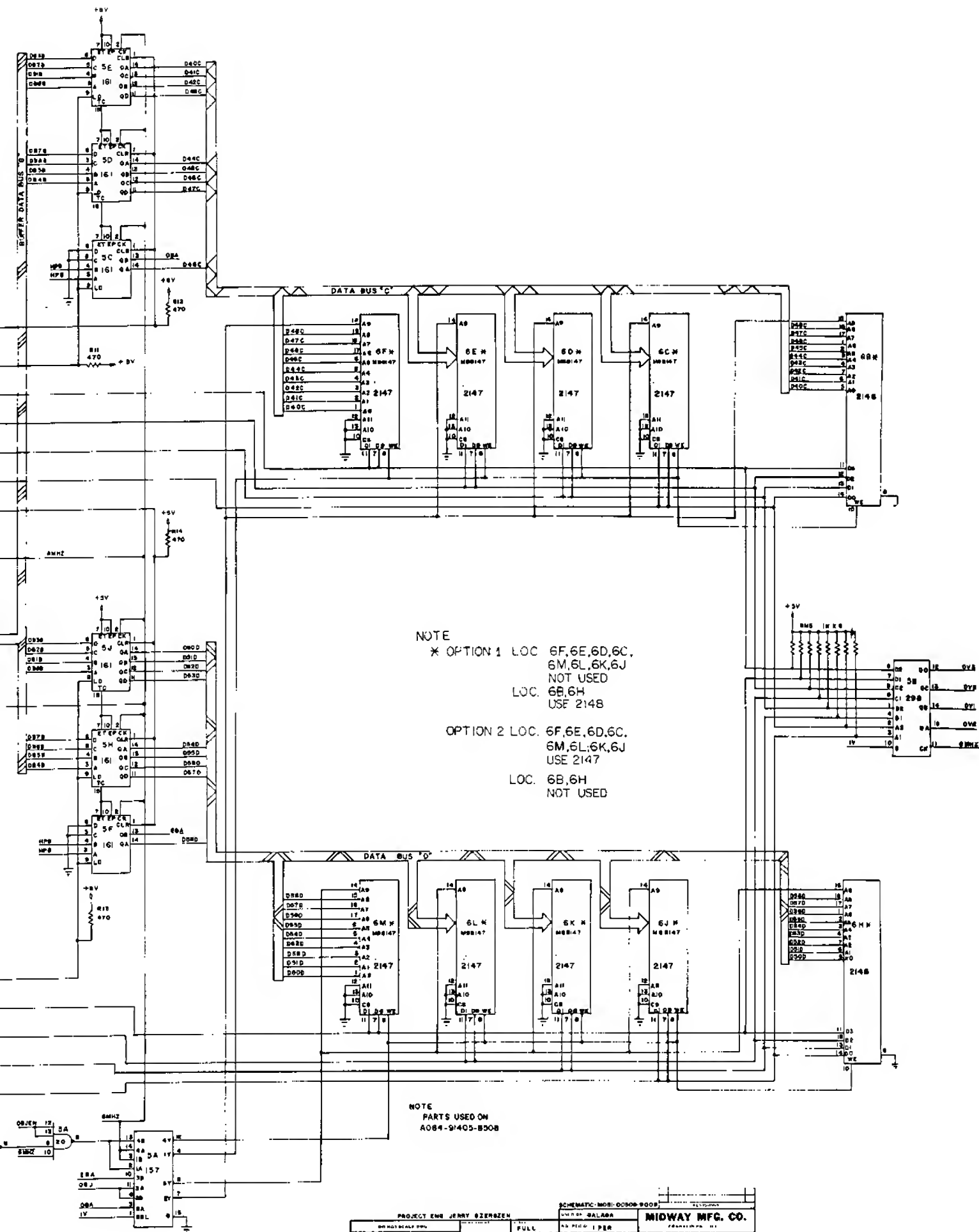
DESCRIPTION	QUANTITY	DESIGNATION	PART #
220PF 500V 15% MCA CAP	1	C3	0508-00607-0100
.001MF 50V CER CAP	1	C2	0508-00800-0200
.1MF	15	C4-C21	0508-00800-0300
470MF 16V AX. ELEC	1	C1	0508-00800-0400
100 OHM 1/4W 5% CRBN. RES.	1	R10	0062-11083-1XXXX
220 "	3	R1, R3, R8	0062-13363-1XXXX
330 "	1	R7	0062-14483-1XXXX
470 "	7	R2, R4, R7, R11-R14	0062-15683-1XXXX
1K "	10	R5, R6, R9, R15, R16, R18-R22	0062-17883-1XXXX
1K 8P (4-UNIT) 5-PIN	3	RM6-RM8	0508-00804-0100
1K 8P (8-UNIT) 9-PIN	1	RM5	0508-00804-0200
2.2K	4	RM1-RM4	0508-00804-0300
00XX CUSTOM IC	1	IC1L	0066-001CX-XAPX
02XX "	1	IC4H	0066-002CX-XAPX
04XX "	1	IC1H	0066-003CX-XAPX
08XX "	1	IC4M	0066-004CX-XAPX
07XX "	1	IC1N	0066-008CX-XAPX
2114-2 ST. RAM 200NS. (1024X4)	6	IC3E, 3F, 3H, 3J, 3K, 3L	0508-00803-0300
74LS00	1	IC3M	0508-00803-0400
74LS08	1	IC1D	0508-00803-0500
74LS20	3	IC2B, 3A, 5L	0508-00803-0600
74LS32	1	IC1F	0508-00803-0700
74LS86	4	IC3A, 4B, 4C, 6N	0508-00803-0800
74LS138	1	IC1E	0508-00803-0900
74LS155	1	IC1B	0508-00803-1000
74LS167	1	IC4A	0508-00803-1100
74LS181	6	IC5C, 5D, 5E, 5F, 5H, 5J	0508-00803-1200
74LS245	4	IC2F, 2H, 2J, 2K	0508-00803-1300
74LS257	1	IC5M	0508-00803-1400
74LS269	1	IC5K	0508-00803-1500
74LS273	3	IC2C, 2E, 2L	0508-00803-1600
74LS283	2	IC5C, 5O	0508-00803-1700
74LS298	1	IC5B	0508-00803-1800
74LS365	2	IC6A, 6A	0508-00803-1900
74LS368	1	IC3N	0508-00803-2000
74LS377	2	IC2O, 2M	0508-00803-2100
GG-3 PROM (256X4)	1	IC1C	0508-00803-2300
GG-4 "	1	IC2N	0508-00803-3000
GG-5 PROM (32X8)	1	IC5N	0508-00803-3100
GG-J EPROM (4096X8)	1	IC4L	0508-00803-2400
GG-K "	1	IC4F	0508-00803-2700
GG-L "	1	IC4D	0508-00803-2800
STATC. RAM (2KX8)	1	IC1K	0508-00803-2500
" VIDEO RAM KIT "	1	MAIN PHATOM	0508-00803-4000
" OPTION1 "	1	SUB PHATOM	NOT RELEASED
- 2148 RAM (1KX4)	2	IC6B, 6H	(IN ABOVE NUMBER)
" OPTION2 "	1	SUB PHATOM	0508-00803-2200
- 2147 RAM (4KX1)	8	IC6C, 6D, 6E, 6F, 6J, 6K, 6L, 6M	(IN ABOVE NUMBER)
* NOTE: ASSEMBLY TO INCLUDE EITHER "OPTION1" OR "OPTION2" AS PER LATEST RELEASED B.O.M.			
16-PIN IC SOCKET	3	IC3IC, 2N, 3N	0508-00804-0700
18-PIN "	6	IC5E, 3F, 3H, 3J, 3K, 3L	0508-00804-0800
24-PIN "	5	IC5IK, 4D, 4F, 4L, 4M	0508-00804-0500
28-PIN "	4	IC5IH, 1L, 1N, 4H	0508-00804-0400
CONNECTOR - R.A. HEADER 50-PIN	1	J1	0508-00804-0800
CONNECTOR - PCB HEADER 6-PIN	1	J2	0017-00021-0424
MOUNTING HARDWARE -			
DUAL LKG. PCB SPACER	4	MHI-MH4	0017-00042-0253
PCB	1	"GALAGA" VIDEO P.C.B.	A080-91405-8508
CABLE ASSEMBLY	1	CABLE ASSY	A508-00027-0000
50-PIN			
PLUG - SOCKET CONNECTOR	2	PI, P2	0508-00804-0900
RIBBON CABLE - .33 FT	1	CABLE	0017-00033-0348
50-CONDUCTOR 28GA			
STRND AND CONDUCTOR			

PROJECT ENG: JERRY SZERSZEN

ASSEMBLY M051-00808-8007

DO NOT SCALE DWS		DATE	TIME	BY	REV
DIM TOLERANCES (UNLESS SPECIFIED)		FULL			
MATERIAL		NO REVISIONS			
MIDWAY MFG. CO.		GALAGA VIDEO P.C			
A084-91405-8508		A084-91405-8508			





PROJECT ENG JERRY SZENZEN		SCHEMATIC NO: 00508-9008	
DO NOT SCALE DIMS		REV. 1	
DATE 10/18/81		DESIGNED BY J. GALAGA	
DRAWN BY J. PER		MIDWAY MFG. CO.	
GALAGA VIDEO P.C.		A084-91405-B508	

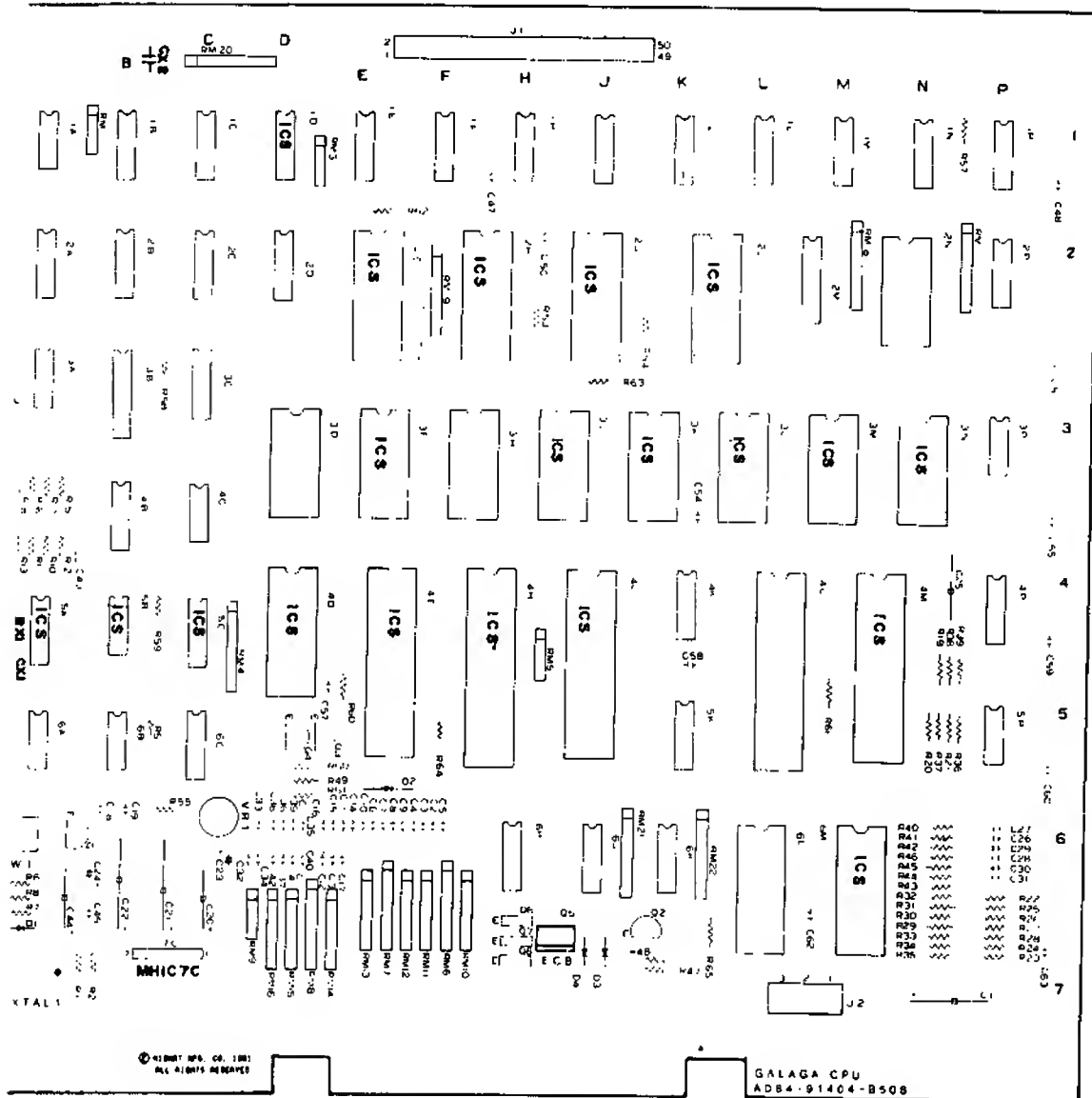
DESIGNATION LIST

DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION
C1	470MF 16V AX.ELEC	RM1-RM3	1K OHM 4-UNIT 5-PIN SIP
C2-C17	.01MF 50V CER	RM4	1K OHM 8-UNIT 9-PIN SIP
C18	.1MF " "	RM5	1K OHM 4-UNIT 5-PIN SIP
C19	.01MF " "	RM6, RM7	1K OHM 8-UNIT 9-PIN SIP
C20	22MF 35V AX.ELEC	RM8	NOT USED
C21	220MF 16V AX.ELEC	RM9	1K OHM 4-UNIT 5-PIN SIP
C22	100 MF " "	RM10-RM13	2.2K OHM 4-UNIT 8-PIN SIP
C23,C24	.15 MF 25V 10% RD.TANT	RM14, RM15	NOT USED
C25	10MF 16V AX.ELEC	RM16	220 OHM 4-UNIT 8-PIN SIP
C26-C29	.01MF 100V 10% MYLAR	RM17-RM20	2.2K OHM 8-UNIT 9-PIN SIP
C30-C42	NOT USED	RM21, RM22	4.7K OHM 8-UNIT 9-PIN SIP
C43	.0022 MF 50V 10% CER		
C44	10MF 16V AX.ELEC	VR1	1K OHM 1/4w CRBN. POT UP W/O KNOB ALPS "MIDIA-1K OHM
C45	100PF 50V CER		
C46-C63	.1MF 50V CER		
R1, R2	330 OHM 1/4w 5% CRBN	D1	1N914B
R3, R4	NOT USED	D2-D4	NOT USED
R5	100 OHM 1/4 5% CRBN	Q1	2N3391A
R6	1K " " " "	Q2	2N4403
R7, R8	10K " " " "	Q3, Q4	NOT USED
R9	NOT USED	Q5	TIP IN
R10	10K OHM 1/4w 5% CRBN	Q6-Q8	NOT USED
R11	22K " " " "		
R12	47K " " " "	IC1A	74LS107
R13	100K " " " "	"1B	74LS283
R14	NOT USED	"1C	74LS174
R15	470 OHM 1/4w 5% CRBN	"1D	GG-1 PROM (256X4)
R16	1K " " " "	"1E, 1F, 1H, 1J, 1K, 1L	74LS367
R17	2.2K " " " "	"1M, 1N	74LS367
R18	4.7K " " " "	"1P	74LS158
R19	10K " " " "	"2A, 2B	7489
R20	3.3K " " " "	"2C	74LS157
R21-R28	NOT USED	"2D	74LS156
R29	4.7K OHM 1/4w 5% CRBN	"2E, 2H, 2J	08XX CUSTOM IC
R30	10K " " " "	"2L	06XX "
R31	22K " " " "	"2M, 2N	NOT USED
R32, R33	47K " " " "	"2P	74LS156
R34	10K " " " "	"3A	4066 CMOS
R35	150K " " " "	"3B	74LS273
R36	33K " " " "	"3C	74LS259
R37	10K " " " "	"3D	NOT USED
R38	3.3K " " " "	"3E	GG-0 EPROM (4KX8)
R39	2.2K " " " "	"3H	NOT USED
R40	470K " " " "	"3J	GG-E EPROM (4KX8)
R41	22K " " " "	"3K	GG-D " "
R42	150K " " " "	"3L	GG-C " "
R43	4.7K " " " "	"3M	GG-B " "
R44	10K " " " "	"3N	GG-A " "
R45	22K " " " "	"3P	74LS32
R46	47K " " " "	"4B	74LS139
R47, R48	470 " " " "	"4C	74LS32
R49, R50	NOT USED	"4D	07XX CUSTOM IC
R51	10K OHM 1/4w 5% CRBN	"4E	280 MICROPROCESSOR 2.5MHZ
R52-R54	1K " " " "	"4H	51XX CUSTOM IC
R55	NOT USED	"4J	280 MICROPROCESSOR 2.5MHZ
R56-R63	1K OHM 1/4w 5% CRBN	"4K	74LS151
R64, R65	4.7K " " " "	"4L	NOT USED
CX1	33PF 50V CER	"4M	Z80A MICROPROCESSOR 4.0MHZ
CX2	100PF " "		
RX1	1K OHM 1/4w 5% CRBN		

DESIGNATION LIST

DESIGNATION	DESCRIPTION
RM1-RM3	1K OHM 4-UNIT 5-PIN SIP
RM4	1K OHM 8-UNIT 9-PIN SIP
RM5	1K OHM 4-UNIT 5-PIN SIP
RM6, RM7	1K OHM 8-UNIT 9-PIN SIP
RM8	NOT USED
RM9	1K OHM 4-UNIT 5-PIN SIP
RM10-KM13	2.2K OHM 4-UNIT 6-PIN SIP
RM14, RM15	NOT USED
RM16	220 OHM 4-UNIT 6-PIN SIP
RM17-RM20	2.2K OHM 8-UNIT 9-PIN SIP
RM21, RM22	4.7K OHM 8-UNIT 9-PIN SIP
VR1	1K OHM 1/4w CRBN POT UP W/O KNOB ALPS HIO51A-1KOHM
DI	1N914B
D2-D4	NOT USED
Q1	2N3391A
Q2	2N4403
Q3, Q4	NOT USED
Q5	TIP 110
Q6-Q8	NOT USED
IC 1A	74LS107
" 1B	74LS283
" 1C	74LS174
" 1D	GG-1 PROM (256 X 4)
" 1E, 1F, 1H, 1J, 1K, 1L	74LS367
" 1M, 1N	74LS367
" 1P	74LS138
" 2A, 2B	7499
" 2C	74LS157
" 2D	74LS158
" 2E, 2H, 2J	08XX CUSTOM IC
" 2L	08XX "
" 2M, 2N	NOT USED
" 2P	74LS138
" 3A	4066 CMOS
" 3B	74LS273
" 3C	74LS259
" 3D	NOT USED
" 3E	GG-9 EPROM (4K X 8)
" 3H	NOT USED
" 3J	GG-E EPROM (4K X 8)
" 3K	GG-D " "
" 3L	GG-C " "
" 3M	GG-B " "
" 3N	GG-A " "
" 3P	74LS32
" 4B	74LS139
" 4C	74LS32
" 4D	07XX CUSTOM IC
" 4E	Z80 MICROPROCESSOR 2.5MHZ
" 4H	51XX CUSTOM IC
" 4J	Z80 MICROPROCESSOR 2.5MHZ
" 4K	74LS151
" 4L	NOT USED
" 4M	Z80A MICROPROCESSOR 4.0 MHZ

DESIGNATION	DESCRIPTION
IC 4P	74LS139
" 5A	74LS368
" 5B	74LS107
" 5C	GG-2 PROM (256 X 4)
" 5K	74LS151
" 5P	LM324
" 6A	74LS393
" 6B	74128
" 6C	74LS139
" 6H	NOT USED
" 6L	" "
" 6M	54XX CUSTOM IC
" 7C	MB3730
ICS ID	16-PIN IC SOCKET
" 2E, 2H, 2J, 2L	28-PIN " "
" 3E, 3J, 3K, 3L, 3M, 3N	24-PIN " "
" 5A	16-PIN " "
" 5B	14-PIN " "
" 5C	16-PIN " "
" 4D	28-PIN " "
" 4E	40-PIN " "
" 4H	42-PIN " "
" 4J, 4M	40-PIN " "
" 6M	28-PIN " "
XTAL1	18.432 MHZ CRYSTAL
SW1	AKC-6 P.B SWITCH
DIP SW 6J, 6K	8-POS DIP SWITCH
J1	CONN.- R.A. HEADER 50-PIN
J2	CONN.- PCB HEADER 3-PIN
MH1C7C	MOUNTING HARDWARE
	-(2) 4-40 HEX NUT
	-(2) 4-40 X 8 SLT. PAN M.S
	-(2) W8H.4 .125-.250-.052 FLT. ST.
	-(2) W8H.4 .120-.250-.018 EXT. ST.
AO80-91404-C508	GALAGA "CPU P.C.B"



DESCRIPTION

QUA

33PF 50V CER
100PF " "
0.0022MF " "
0.01MF 25V CER
0.01MF 100V MYLAR
0.1MF 50V CER
0.1MF 25V R.D TANT
10MF 16V AX. ELEC
22MF 35V " "
100MF 16V " "
220MF 16V " "
470MF 16V " "

100 OHM 1/4w CRBN RESIS

330 " " " "
470 " " " "
1K " " " "

2.2K " " " "
3.3K " " " "
4.7K " " " "
10K " " " "

22K " " " "
33K " " " "
47K " " " "
100K " " " "
150K " " " "
470K " " " "

220 OHM 81P (4-UNIT) 8-P
1K " " " " 5-P
1K " " (8-UNIT) 8-P
2.2K " " (4-UNIT) 8-P
2.2K " " (8-UNIT) 8-P
4.7K " " " " "

1K OHM POTENTIOMETER

IN9148

2N3391A

2N4403

TIP 110

06XX CUSTOM IC

07XX " " "

08XX " " "

51XX " " "

54XX " " "

4066 CMOS

74LS32

7489

74LS107

74128

74LS138

74LS139

74LS151

74LS157

74LS158

74LS174

74LS259

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CROSS REFERENCE LIST

QTY	DESIGNATION	PART #	DESCRIPTION	QUANTITY	DESIGNATION	PART #
	CX1*	0508-00800-2000	74LS273	1	IC39	0508-00803-1600
	C46,CX2**	0508-00800-0500	74LS263	1	IC18	0508-00803-1700
	C43	0508-00800-0600	74LS367	6	IC1E,IF,IH,IJ,IK,IL	0508-00803-4800
	C2-C17,C19	0508-00800-0800			IM,IN	
	C26-C29	0508-00800-0700	74LS368	1	IC5A	0508-00803-2000
	C18,C46-C63	0508-00800-0900	74LS393	1	IC6A	0508-00803-4900
	C23,C24	0508-00800-1000	GG-1 PROM (256X4)	1	IC1D	0508-00803-3800
	C25,C44	0508-00800-1100	GG-2 "	1	IC5C	0508-00803-3900
	C20	0508-00800-1200	GG-A EPROM 2732	1	IC3N	0508-00803-3200
	C22	0508-00800-1300	GG-B "	1	IC3M	0508-00803-3300
	C21	0508-00800-1400	GG-C "	1	IC3L	0508-00803-3400
	C1	0508-00800-1500	GG-D "	1	IC3K	0508-00803-3500
			GG-E "	1	IC3J	0508-00803-3600
			GG-G "	1	IC3E	0508-00803-3700
	R5	0062-110B3-1XXX	LM324	1	IC5P	0508-00803-5400
	R1,R2	0062-144B3-1XXX	M83730	1	IC7C	0066-186XX-XX4X
	R15,R47,R48	0062-158B3-1XXX	Z-80 (2.5MHZ)	2	IC4E,J	0508-00803-5000
	R6,R16,R52-R54	0062-179B3-1XXX	Z-80A (4.0MHZ)	1	IC4M	0508-00803-5200
	R56-R63,RX1***					
	R17,R39	0062-195B3-1XXX	(4-PIN) IC SOCKET	1	IC55B	0508-00804-1700
	R20,R58	0062-205B3-1XXX	(6-PIN) " "	3	IC510,5A,5C	0508-00804-0700
	R18,R29,R43,R64,R65	0062-211B3-1XXX	(24-PIN) " "	6	IC53E,5J,5K,5L,5M,5N	0508-00804-0900
	R7,R8,R10,R19,R30	0062-227B3-1XXX	(28-PIN) " "	6	IC52E,2H,2J,2L,4D,6M	0508-00804-0400
	R34,R37,R44,R51		(40-PIN) " "	3	IC54E,4J,4M	0508-00804-1800
	R11,R31,R41,R45	0062-243B3-1XXX	(42-PIN) " "	1	IC54H	0508-00804-1900
	R36	0062-251B3-1XXX	18.432 MHZ CRYSTAL	1	XTAL I	0508-00804-1400
	R12,R32,R33,R46	0062-259B3-1XXX	P.B SWITCH AKC-8	1	SW1	0508-00804-1600
	R13	0062-275B3-1XXX	8-POS DIPSWITCH	2	6J,6K	0508-00804-1800
	R35,R42	0062-283B3-1XXX	CONN-R.A. HEADER 50-PIN	1	J1	0508-00804-0800
	R40	0062-307B3-1XXX	CONN. PCB HEADER 3-PIN	1	J2	0017-00021-0443
	RM16	0508-00804-1100	MOUNTING HARDWARE IC7C		MHC17C	
	RM1-RM3,RM5,RM9	0508-00804-0100	-4-40 HEX NUT	2		0017-00103-0002
	RM4,RM6,RM7	0508-00804-0200	-4-40 X8 PAN M.S	2		0017-00101-0810
	RM10-RM13	0508-00804-1200	-WASHER #4 FLT. ST.	2		0017-00104-0015
	RM17-RM20	0508-00804-0300	-WASHER #4 EXT. ST	2		0017-00104-0071
	RM21,RM22	0508-00804-1000				
	VRI	0508-00804-1300	GALAGA CPU PCB	1	A080-91404-C508	A080-91404-B508
	DI	0508-00801-0100				
	Q1	0508-00802-0200				
	Q2	0508-00802-0100				
	Q5	0508-00802-0300				
	IC2L	0066-005CX-XAPX				
	IC4D	0066-006CX-XAPX				
	IC2E,2H,2J	0066-007CX-XAPX				
	IC4H	0066-008CX-XAPX				
	IC6M	0066-009CX-XAPX				
	IC3A	0508-00803-5300				
	IC3P,4C	0508-00803-0700				
	IC2A,2B	0508-00803-4100				
	IC1A,5B	0508-00803-4200				
	IC6B	0508-00803-4300				
	IC1P,2P	0508-00803-0900				
	IC 3,6C	0508-00803-4400				
	IC4J	0508-00803-5000				
	IC4K,5K	0508-00803-4500				
	IC2C	0508-00803-1100				
	IC2D	0508-00803-4600				
	IC1C	0508-00803-4700				
	IC3C	0508-00803-1500				

ASSEMBLY M051-00508-C005

PROJECT ENG: JERRY SZERSZEN

USED ON GALAGA

MIDWAY MFG. CO.

DO NOT SCALE DWG

HEAT TREAT

SCALE

FULL

NO REQ'D IPER

REVISIONS

DIM TOLERANCES

UNLESS SPECIFIED

MAT'L

FINISH

PART NO

FOR IDENTIFICATION

FUNCTIONAL

DECIMAL

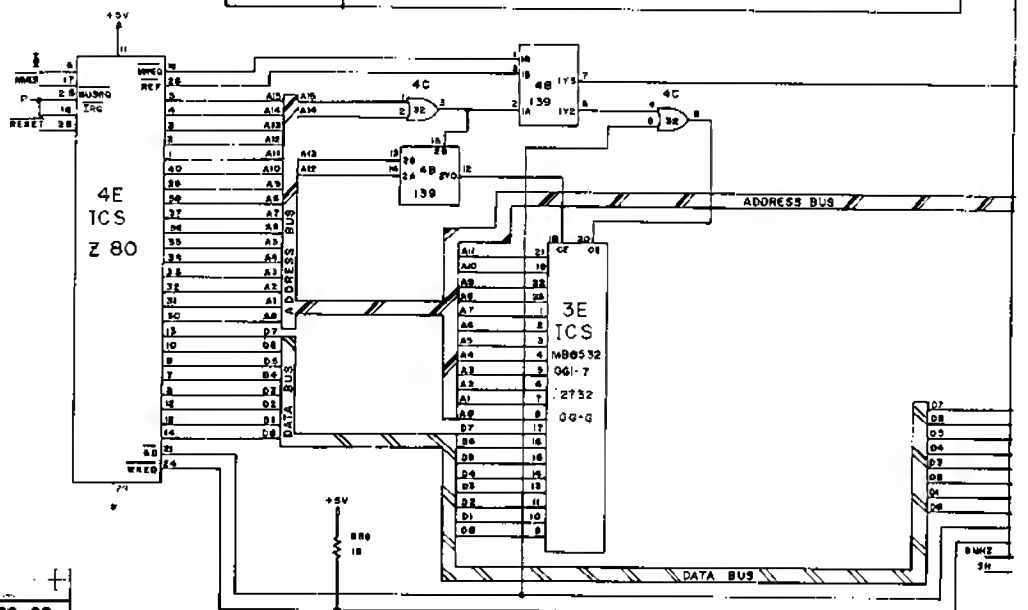
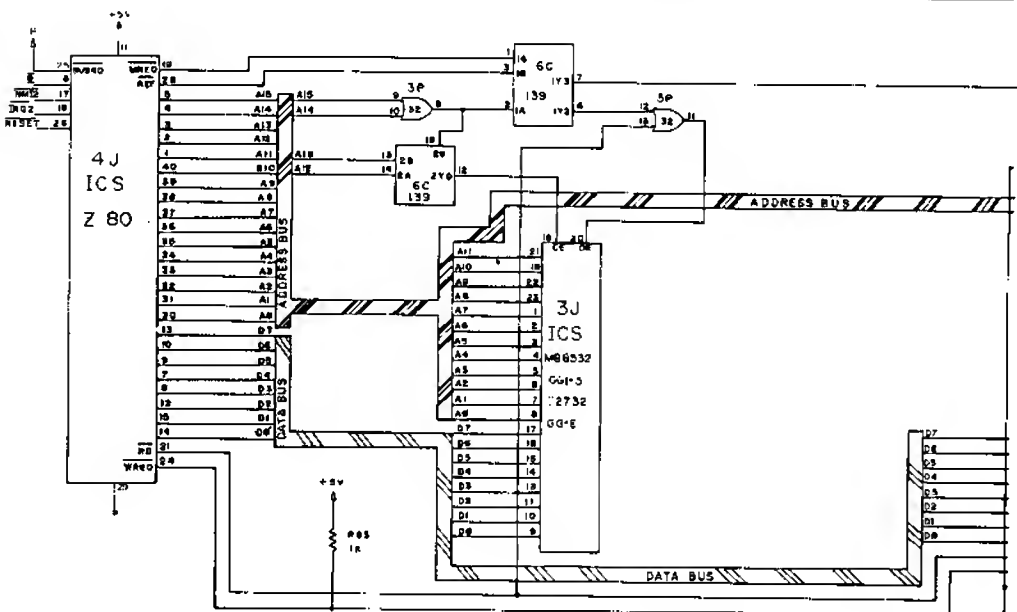
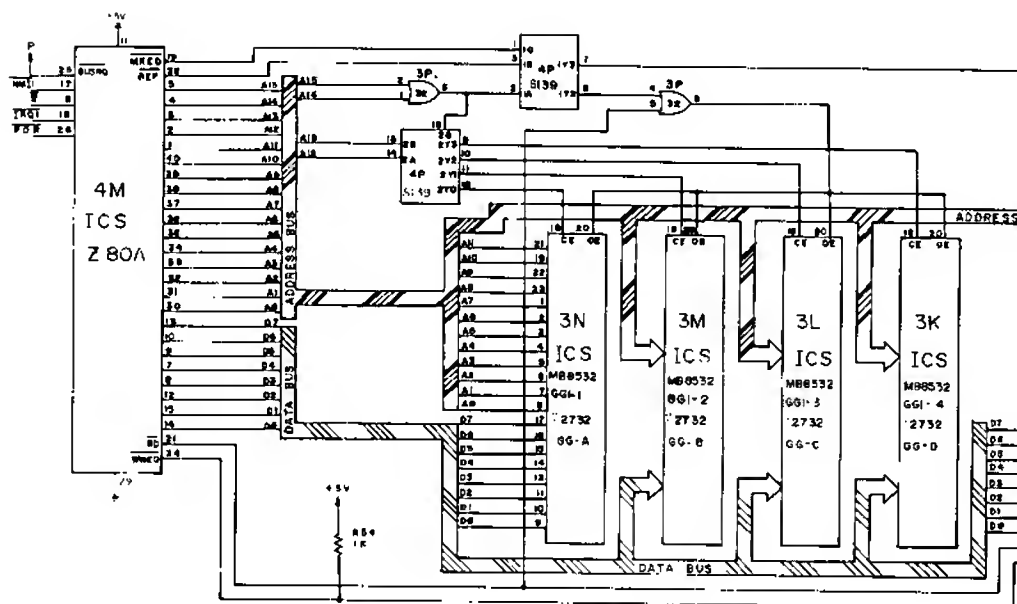
GALAGA CPU P.C.

A084-91404-C508

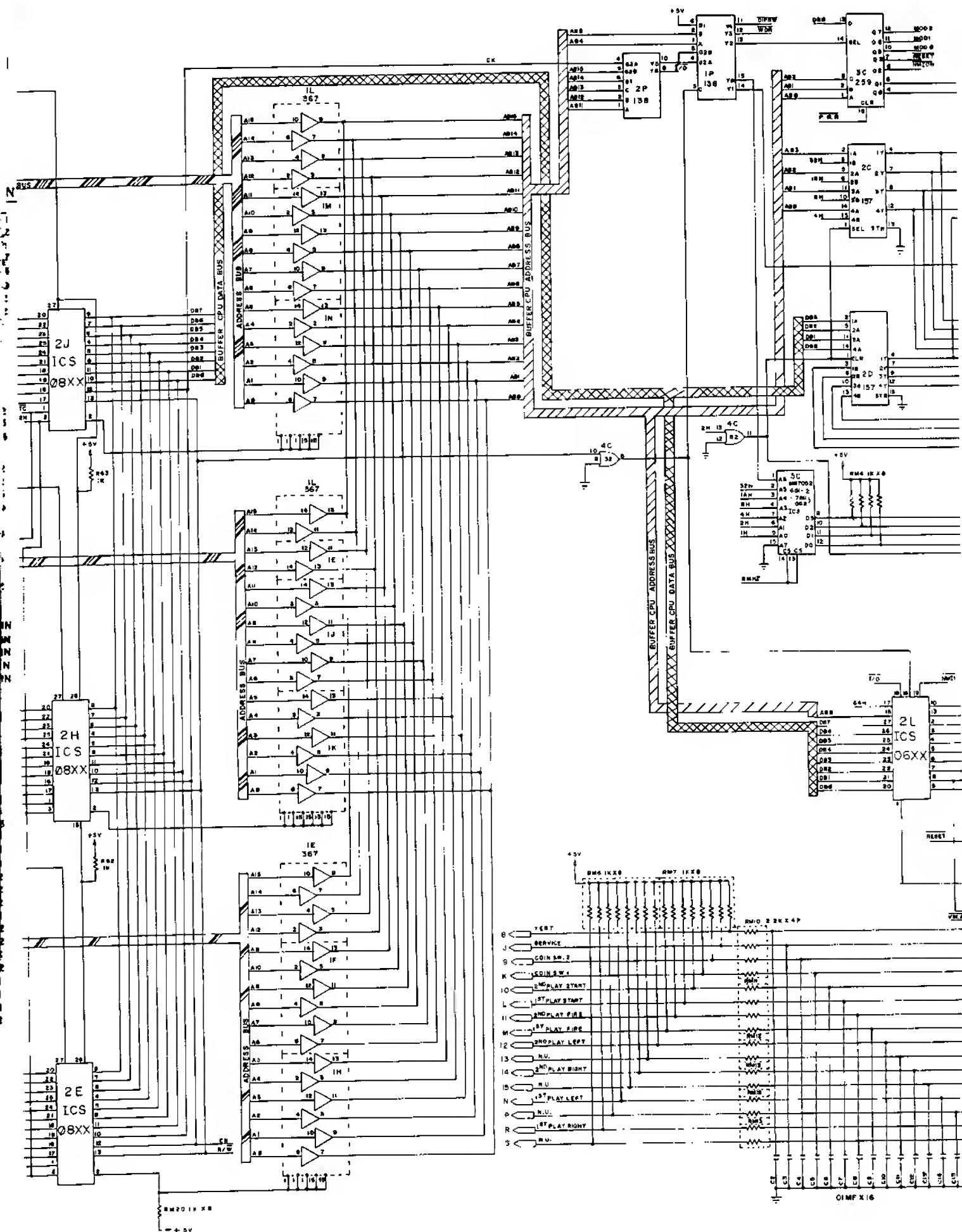
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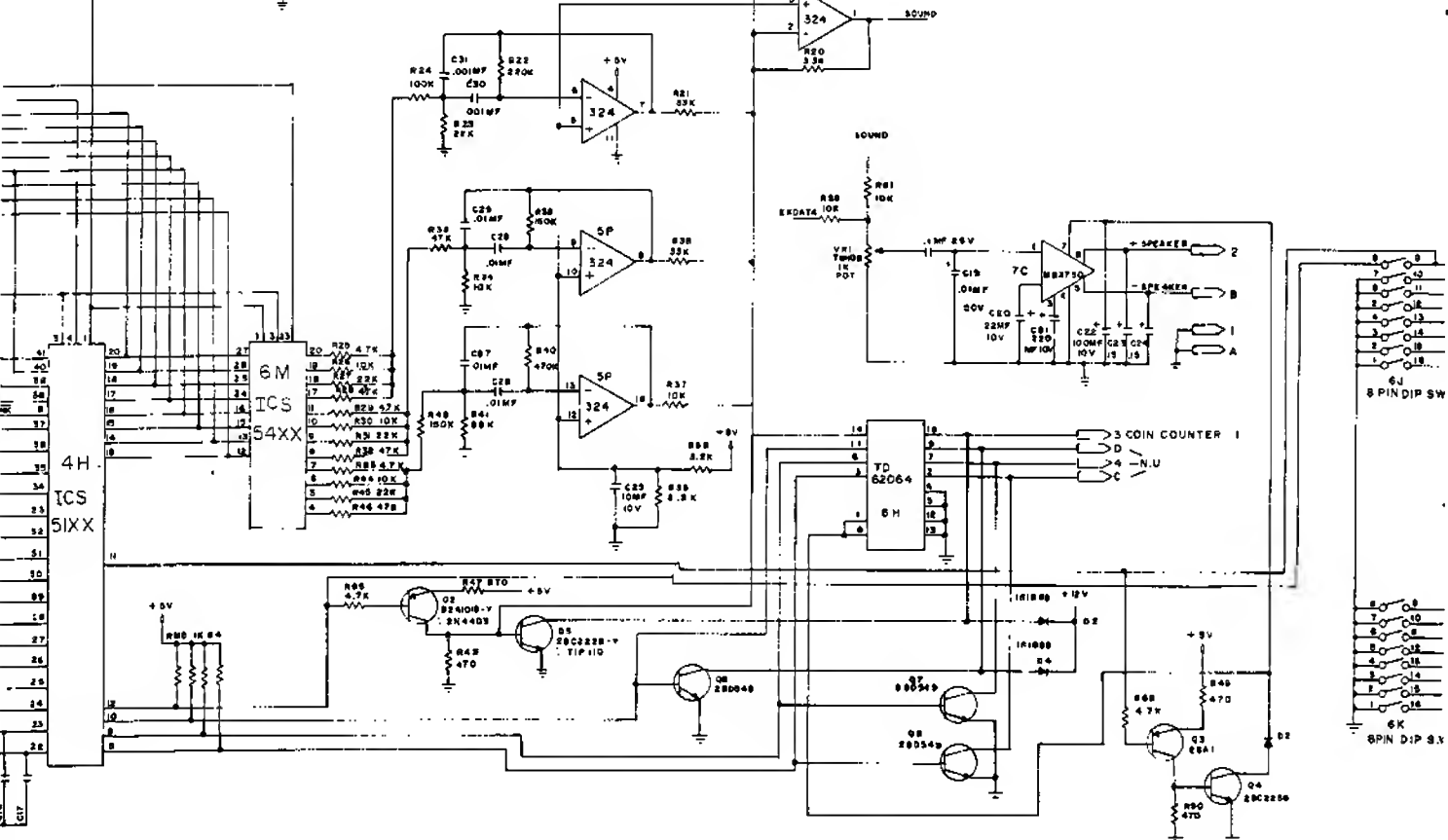
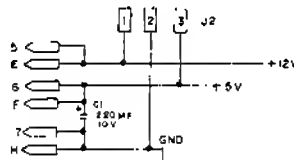
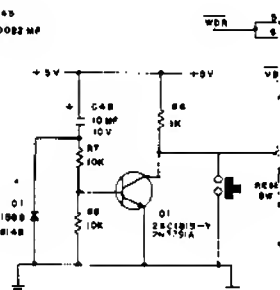
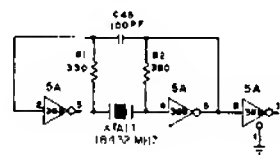
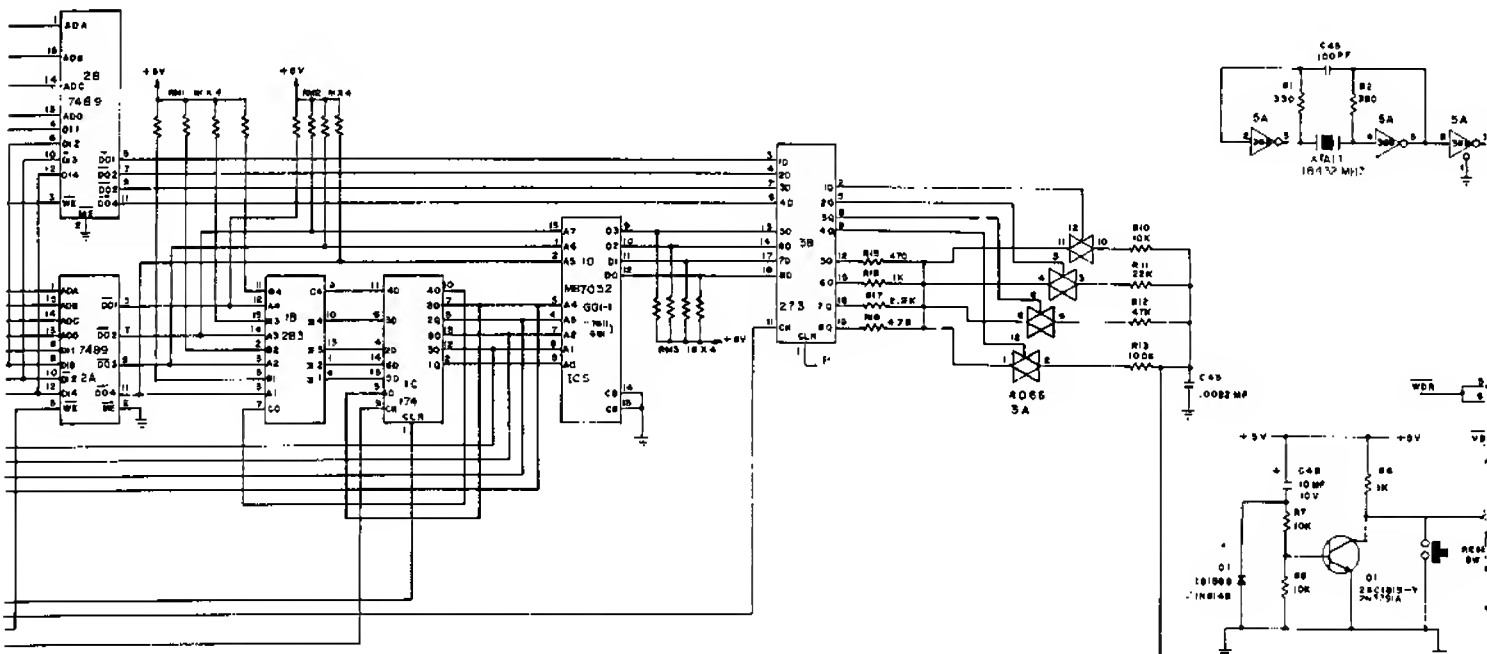
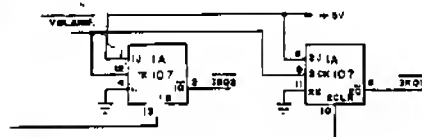
DATE

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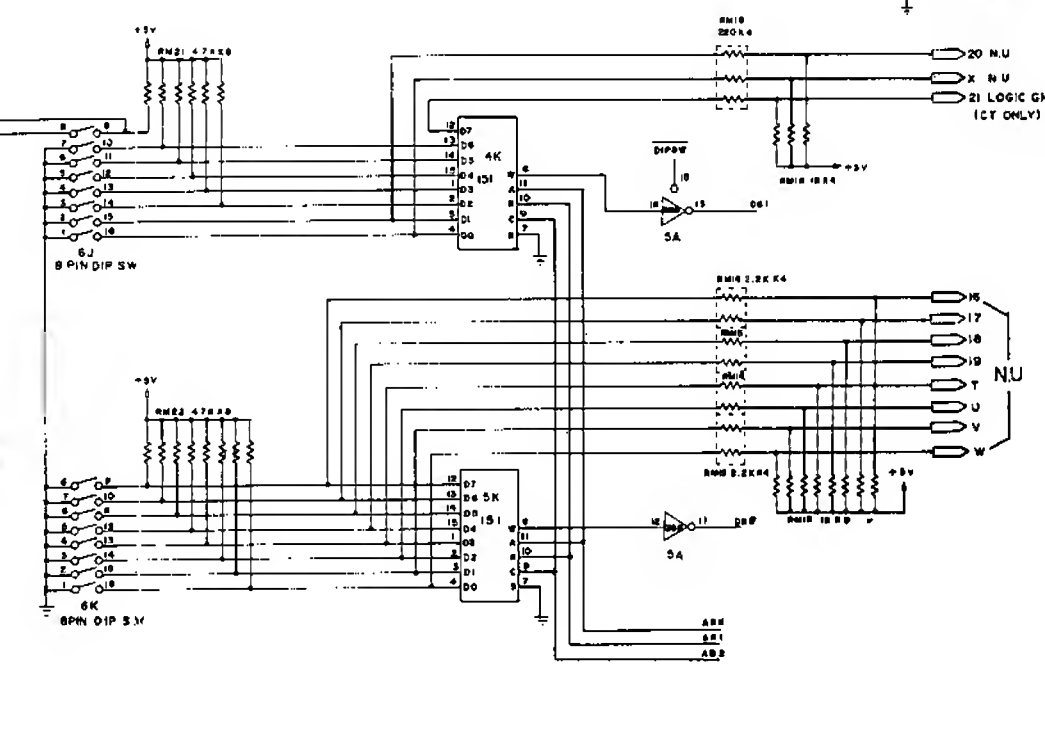
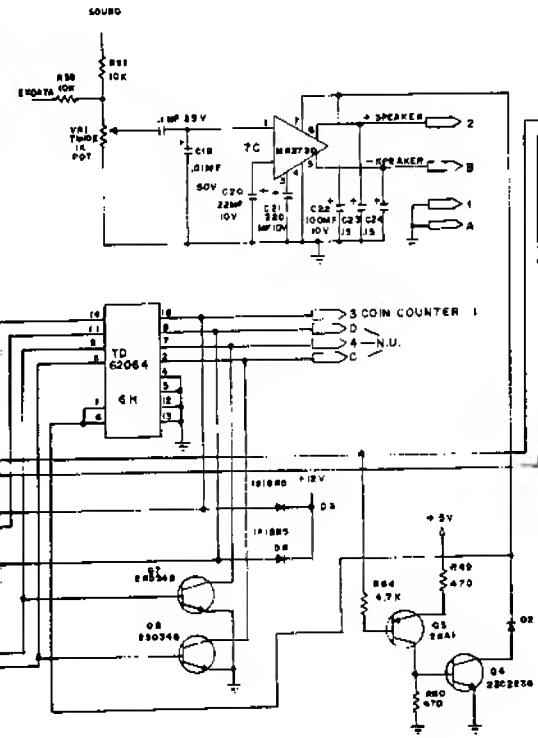
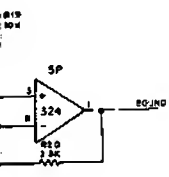
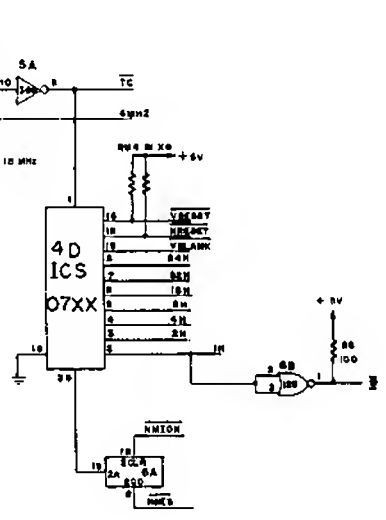
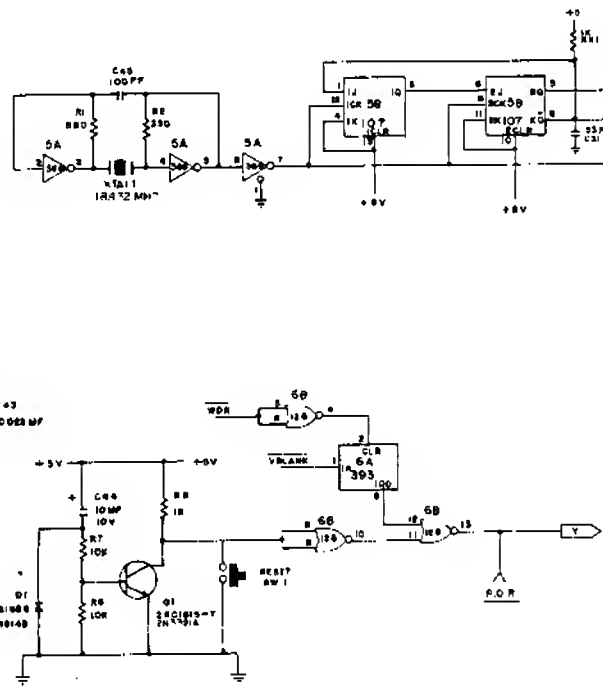
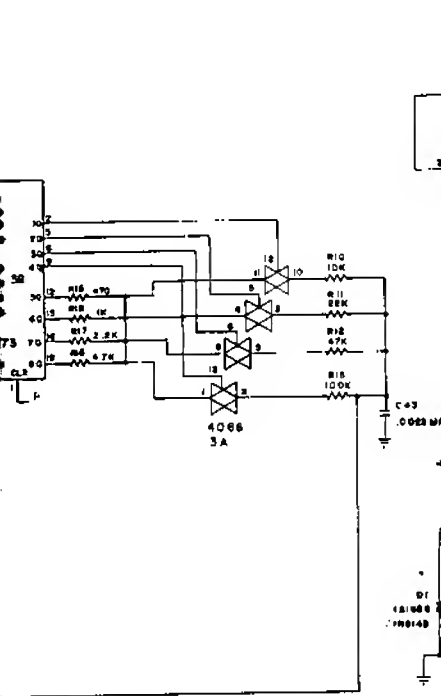


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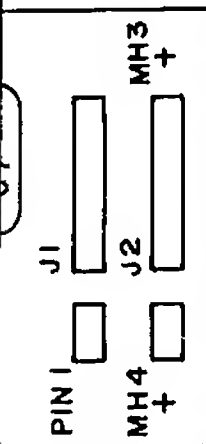


PARTS
 AC84-1
 PCBS
 4H ICS 51XX
 6M ICS 54XX
 TD 6206-4
 4065 3A
 74LS90
 74LS163
 74LS161
 74LS16
 74LS15
 74LS14
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 74LS05
 74LS04
 74LS03
 74LS02
 74LS01
 74LS00



CROSS REFERENCE LIST

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>DESIGNATION</u>	<u>PART #</u>
.01MF 25VAX CER	5	C3-C7	0508-00800-0800
.1MF 100V 10% MYLAR	2	C1, C2	0508-00800-2300
68 OHM 1/4w 5% CRBN RES.	2	R6, R8	0062-098B3-1XXX
1K " " " " "	2	R5, R7	0062-179B3-1XXX
1MEG " " " " "	4	R1-R4	0062-323B3-1XXX
LM556	1	U1	0508-00803-5500
7400	1	U2	0508-00803-5600
KK.156 CON. (2-PIN)	2	J1, J2	3000-16335-0200
(6-PIN)	2	J1, J2	3000-16335-0600
MOUNTING HARDWARE			
SNAP BUSHING 1/4 "	4	MH1-MH4	0017-00042-0014
RAPID FIRE P.C	1	A080-91410-A000	A080-91410-A000



ASSY M051-00114-A001

THIS DWG. IS CONFIDENTIAL & PROPERTY OF MIDWAY MFG. CO.

AGA

09-30-81

FULL



MIDWAY MFG. CO.
FRANKLIN PK., IL. 60131 A BAILLY CO

RAPID FIRE P.C.

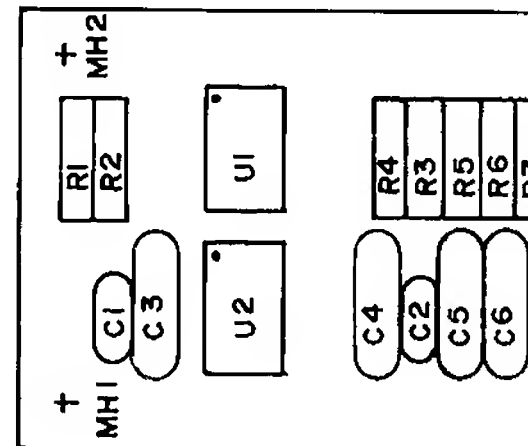
REVISIONS

PART NO

A080-91410-A000

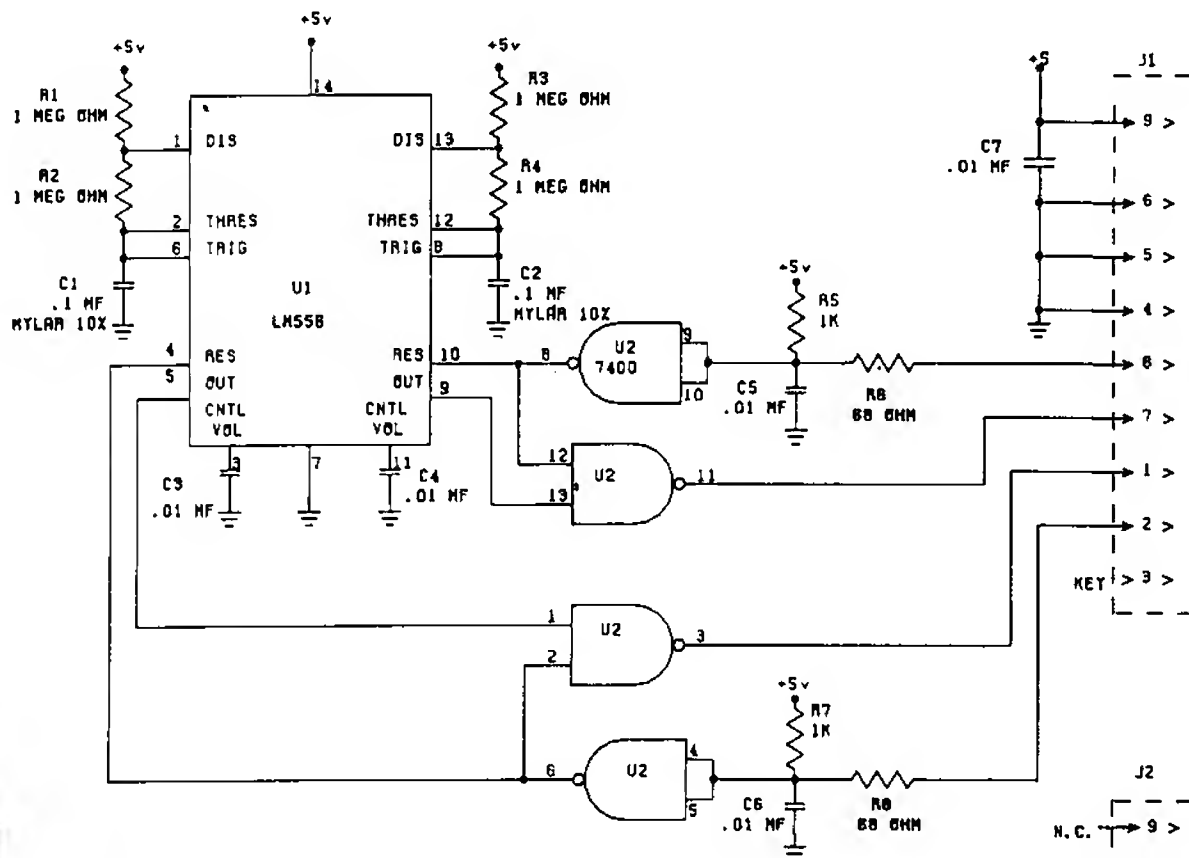
DESIGNATION LIST

<u>DESIGNATION</u>	<u>DESCRIPTION</u>
C1, C2	.1MF 100V MYLAR
C3-C7	.01MF 25V AX CER
R1-R4	1MEG OHM 1/4w 5% CRBN RES
R5	1K " " " " "
R6	68 " " " " "
R7	1K " " " " "
R8	68 " " " " "
U1	LM556
U2	7400
J1, J2	KK-156 VERT 2(6-PIN) 2(2-PIN)
MH1-MH4	SNAP BUSHING 1/4"



PROJECT ENG: JERRY SZERS

DIM. TOLERANCES UNLESS OTHERWISE SPEC	FORM 1 PAGE 1 OF 1	G
CONCENTRICITY TIR .002	DATE	MM
FRACTIONAL ± .1/64	DESIGNED BY	
DECIMAL ± .005	CHECKED BY	
HOLE DIA + .002-- .000	ETCHED BY	
ANGLE ± 1/2°		
DO NOT SCALE DWG		

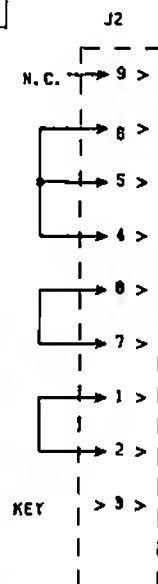


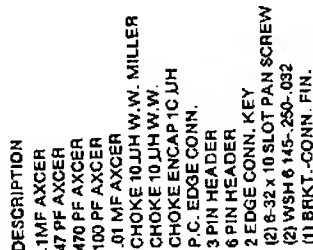
NOTE: USE J1
FOR RAPID
FIRE OPTION

NOTE: USE J2 TO
BYPASS
RAPID FIRE
OPTION

M051-00114-A002

CKD.	DO NOT SCALE DIM.		REVISIONS
DAN. TJK	DATE 9/30/81	USED ON GALAGA	
heat treat	scale FULL	NO. REQ'D 1 PER	
mat'l.	RAPID FIRE P.C.		MIDWAY MFG. CO. FRANKLIN PK. ILL.
finish			PART NO. A002-01410-A000





DESCRIPTION	QUANTITY	DESIGNATION	PHANTOM NUMBER
47PF 50V AXCR	4	C2-C5	0508-00800-1800
100PF 50V AXCR	6	C8, C13	0508-00800-1600
707PF 50V AXCR	2	C6, C7	0508-00800-1700
01MF 25V AXCR	19	C14-C32	0508-00800-1800
11MF 50V AXCR	1	C1	0508-00800-0900
10JH W.W. RF CHOKO MILLER	4	L1-L4	0087-021XX-XXAX
10JH W.W. PF CHOKO	4	L5-L8	0508-00804-2000
10JH ENCAP PF CHOKO	4	L9-L12	0508-00804-2100
PF ENGE CONN	1	J1	0017-00021-0418

FRACTIONAL	DECIMAL
7/16	0.005

